

REMARKS/ARGUMENTS

The rejections presented in the Office action dated October 22, 2003 have been considered. Claims 1-39 remain pending in the application. Claims 1, 24, 38 and 39 have been amended. Reconsideration of the pending claims and allowance of the application in view of the present response is respectfully requested.

Claims 1, 8-24, 27-29, 33-35, 38 and 39 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,615,038 to Moles et al. (hereinafter *Moles*). The Applicant respectfully disagrees with the characterization of *Moles* as it applies to the pending claims, and asserts that *Moles* fails to anticipate the claims purported by the Examiner to be anticipated by *Moles*.

Moles is directed to a system for automatically gathering configuration data associated with mobile stations. A database is provided to create/store mobile station configuration records, and an update controller is used to update configuration data on the mobile station (*e.g.*, col. 3, lines 4-15, 33-36). The update controller can periodically poll mobile station manufacturers for upgrade information, and send update alert messages to mobile stations (*e.g.*, col. 7, lines 40-48).

According to *Moles*, service provisioning is carried out in a traditional manner, and mobile station configuration data can be updated during or after the service provisioning process. More particularly, when an unprovisioned mobile station accesses the network, the Base Station (BS) 101 and/or Mobile Switching Center (MSC) 140, using the handset data in the Home Location Register (HLR) 155, performs an over-the-air (OTA) service provisioning of the mobile station (col. 6, lines 28-33). Service provisioning is carried out using a provisioning server, as noted by *Moles* at column 6, lines 40-42 where it indicates that the HLR 155 stores a minimum amount of data to authenticate the mobile station and to establish a connection to the provisioning server. Either during provisioning or subsequently, a mobile station configuration server 160 gathers configuration data from the mobile station and stores it in a configuration record in a database, where this configuration server 160 is thereafter used to transmit mobile station updates to the mobile station (col. 6, lines 33-39). Therefore, *Moles* describes a system using a provisioning server to initially

provision a terminal, and further describes a second system (the mobile station configuration server 160) to assist in performing data or software updates to the particular mobile devices.

These teachings of *Moles* fails to teach the present invention as claimed. Referring first to Claim 1 of the present invention, the method includes interfacing at least one mobile terminal to at least one network service via a provisioning Web service. The Examiner has attempted to equate the teachings of *Moles* with such a provisioning Web service interface, and the Applicant respectfully submits that such a correlation is unfounded. In paragraph 4 of the Office Action, the Examiner asserts that *Moles* teaches interfacing at least one mobile terminal to at least one network service, where the Examiner indicates that a network service is taught by *Moles* in Figure 2, items 100, 165. It is first respectfully submitted that the cited portion fails to identify a network service as set forth in the claims. Figure 2, item 100 of *Moles* references the entire wireless network, and item 165 references the Internet or an intranet. The network services of the present invention refer to, for example, services available on the network(s) that can provide a service/application to a requesting mobile terminal (see, e.g., page 9, lines 9-12). Thus, the Examiner has not identified any network service providing a service/application as set forth in Claim 1.

The Examiner identifies column 1, line 52 through column 2, line 13 as teaching a provisioning Web service as set forth in Claim 1. The Applicant respectfully disagrees. The cited portion of *Moles* merely describes conventional "service provisioning," which is stated to be an OTA process that activates in the cellular handset a Number Assignment Module (NAM), Preferred Roaming List (PRL), and an A-key. As seen from the paragraph immediately preceding the Examiner's cited portion, the described "service provisioning" involves the subscriber calling a special telephone number such as "*288xx" where "xx" is a unique number for each wireless service provider, which causes the new subscriber to connect to an operator (col. 1, lines 54-57). The operator then collects information, such as the subscriber's name, address, credit card information, and type of service desired (col. 1, lines 57-60). When the account information is collected and the account established, the operator instructs the handset buyer to manually enter several sequences of passwords, code numbers and menu-selected commands that enable certain functions in the handset. It is

this procedure that *Moles* refers to as “service provisioning,” which does not describe a provisioning Web service as set forth in the rejected claims. Thus, *Moles* fails to teach any provisioning beyond traditional provisioning techniques, and clearly fails to describe a provisioning Web service.

Claim 1 includes a provisioning “Web service” as an interface between the mobile terminal(s) and the network service(s). A Web service generally refers to a network-based modular application(s) that perform a specific task(s) and conform to a particular technical format. Web services are self-contained modular applications that can be published in a ready-to-use format, located, and invoked across the World Wide Web. When a Web service is deployed, other applications and Web services can locate and invoke the deployed service. (See, e.g., page 10, lines 10-21). By using a Web services interface to the functionality, the applications and services can use the client provisioning capabilities without having knowledge of the underlying mobile technologies. *Moles* fails to describe any Web service, much less a provisioning Web service. Rather, *Moles* merely utilizes standard client-server network communication between the mobile stations and wireless service provider, to provide configuration data or mobile station software updates to a mobile station.

Importantly, *Moles* fails to teach a Web service, or any other entity, that provides a single point of interface *to the network service for provisioning the mobile terminal*. The Examiner attempts to equate a “browser interface” with a Web service interface providing a single point of interface to the network service for provisioning the mobile terminal. The Examiner identifies column 1, lines 41-44 of *Moles* as teaching this recited feature, which states:

For instance, a 3G cell phone (or a PC with a 3G wireless modem) may be used to browse web sites on the Internet, to transmit and receive graphics, to execute streaming audio and/or video applications, and the like.

This recited portion of *Moles* merely indicates that a mobile station user can browse web sites. The Applicant respectfully contends that this teaches nothing with respect to a provisioning Web service that provides a single point of interface to the network service for provisioning the mobile terminal. More particularly, the single point of interface described

in Claim 1 refers to an interface "to the network service." The network service(s) provides applications or other services to mobile terminals over the network, and the provisioning Web service serves as a single point of interface to those network services. Thus, a service provider (i.e., a network service) sees the provisioning Web service as a single point of interface in order to provision mobile terminals. This is markedly different from a browser application on a mobile station. The recited portion of *Moles* does not even discuss the interface between a service provider and a provisioning Web service or provisioning server generally, but rather describes a *user interface* that the mobile device user can use to access web sites on a network. Therefore, *Moles* clearly fails to describe a Web service, that provides a single point of interface to the network service, for provisioning mobile terminals.

To anticipate a claim, the reference must teach every element of the claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Therefore, all claim elements, and their limitations, must be found in the prior art reference to maintain a rejection based on 35 U.S.C. §102. Applicants respectfully submit that *Moles* fails to teach at least the claimed features mentioned above, and therefore fails to teach every element of Claim 1. Therefore, Claim 1 is not anticipated by *Moles*.

In order to facilitate prosecution of the application, the Applicant has amended independent Claim 1. The Applicant notes that it appears the Examiner has misunderstood at least the claimed recitation involving the provisioning Web service providing a single point of interface to the network service. It is the network service(s) that sees the Web service as a single point of interface in order to provision the mobile terminal(s). For example, one representative embodiment is described on page 14, lines 9-17 of Applicant's Specification:

The mobile client provisioning Web service 206 serves as an interface for the application(s) 204 to provision the terminal(s) 202. The provisioning Web service 206 provides a single point of interface to the application(s) 204, and

manages automatic configuration of the terminals 202, including providing the appropriate configurations to the terminal as well as providing the appropriate applications to the terminal. Thus, in accordance with the invention, the provisioning service 206 provisions the mobile client 202 on behalf of the application 204, resulting in a terminal 202 provisioned to use the service provided by the application 204. (emphasis added)

As can be seen from the foregoing, the Web service serves as a single point of interface for network services/applications that want to provision mobile devices. In other words, when a network service wants to provision a mobile terminal, it need not locate multiple entities or services, but rather need only make use of the provisioning Web service in order to carry out the desired mobile terminal provisioning. The Examiner's correlation of a mobile station "browser" with a provisioning Web service that provides a single point of interface *to the network service* is therefore erroneous. While it is believed that the original text of Claim 1 accurately sets forth that the provisioning Web service serves as a single point of interface from the point of view of the network service(s), the Applicant has amended Claim 1 to state the same concept using slightly modified language. The Applicant has not narrowed, nor has the Applicant intended to narrow, the scope of Claim 1 from its original breadth by way of this amendment.

Claim 1 has been amended to restate that the provisioning Web service provides a single point of interface for the network services that may want to provision one or more mobile terminals. The provisioning Web service serves as a single point of interface for the network service(s) for the purpose of managing the provisioning of mobile terminals. As previously indicated, *Moles* fails to describe such an interface between mobile devices and network services/applications, and particularly where such an interface serves as a single point of interface for the network services/applications wanting to manage and/or perform provisioning of terminals. It is respectfully submitted that Claim 1 is in condition for allowance over the cited art of record.

Dependent Claims 8-20 are dependent from independent Claim 1, and also stand rejected under 35 U.S.C. §102(e) as being unpatentable over *Moles*. While Applicant does not acquiesce with the particular rejections to these dependent claims, these rejections are now moot in view of the remarks and amendment made in connection with independent Claim 1. These dependent claims include all of the limitations of the base claim and any

intervening claims, and recite additional features which further distinguish these claims from the cited references. Therefore, dependent Claims 8-20 are also in condition for allowance.

Independent Claim 21 was also rejected by the Examiner as being anticipated by *Moles*. The Applicant respectfully traverses the Examiner's rejection. The Examiner's rationale for rejecting Claim 21 is stated to be "the same reasons set forth in claims above." The Applicant respectfully contends that *Moles* fails to teach features set forth in Claim 21, and also respectfully contends that the Examiner's rationale is inappropriate as Claim 21 includes recitations different from those addressed by the Examiner in the previously rejected claims. Thus, the Examiner has failed to identify teachings in *Moles* that correspond to all of the features of Claim 21, as is required to support an anticipation rejection.

It is first noted that a Web service mobile terminal configuration module was not discussed by the Examiner in any of the previous claims, nor does the Examiner identify any portion of *Moles* that teaches such a Web service mobile terminal configuration module. Thus, the Examiner has failed to establish that *Moles* anticipates Claim 21 at least for the reason that the Examiner has not addressed the recited feature of a Web service mobile terminal configuration module coupled to a Web service interface to configure the mobile terminals for use of the applications as part of the provisioning process. The Applicant contends that *Moles* does not teach a configuration module, particularly a Web services configuration module, that is used to configure the mobile terminal for use of applications provided by the network service providers. *Moles* describes providing upgrades to mobile stations, but does not teach any such module to configure a mobile device for use of an application(s) hosted or otherwise provided by a network service provider.

Further, as described above, *Moles* fails to teach a Web service interface. *Moles* also fails to teach an interface coupled between the mobile terminals to be provisioned and the network service providers, where such an interface serves as a single interface to the network service providers providing the applications. The failure of *Moles* to describe such a Web service interface was addressed in the Applicant's aforementioned remarks in

connection with Claim 1. For at least this addition reason, the Applicant respectfully contends that independent Claim 21 is not anticipated by *Moles*, and respectfully requests withdrawal of the rejection.

Dependent Claims 22-23 are dependent from independent Claim 21, and also stand rejected under 35 U.S.C. §102(e) as being unpatentable over *Moles*. While Applicant does not acquiesce with the particular rejections to these dependent claims, these rejections are now moot in view of the remarks and amendment made in connection with independent Claim 21. These dependent claims include all of the limitations of independent Claim 21, and recite additional features which further distinguish these claims from the cited references. Therefore, dependent Claims 22-23 are also in condition for allowance.

Independent Claims 24 and 38 were also rejected under 35 U.S.C. §102(b) as being anticipated by *Moles*, using the same rationale as was used in the rejection to independent Claim 1. The remarks presented above in connection with Claim 1 also apply to Claims 24 and 38. For example, with Claim 24, the Examiner has not identified a network service that provides an application via the network, where a provisioning Web service is coupled to the mobile terminal and the network service to control provisioning of the terminal via a single interface to the network service. Thus, there is a single interface for the network service(s) to access in order to provision mobile terminals, and *Moles* fails to describe such an interface for network services to provision terminals.

In order to facilitate prosecution of the application, Claim 24 has been amended to restate that the provisioning Web service is coupled between the mobile terminal and the network service that provides an application(s). While other network entities may be involved in communication, the provisioning Web service is logically coupled between the mobile terminal(s) and the network services that want to provision the mobile terminal(s). The provisioning Web service provides a single interface for the network service to control the provisioning of the mobile terminal. As previously described, *Moles* fails to teach such a provisioning Web service coupled between the mobile terminal and a network service that wants to provision the mobile terminal. For at least this reason, *Moles* fails to anticipate Claim 24, and withdrawal of the rejection thereto is respectfully requested.

Dependent Claims 27-29 and 33-35 are dependent from independent Claim 24, and also stand rejected under 35 U.S.C. §102(e) as being unpatentable over *Moles*. While Applicant does not acquiesce with the particular rejections to these dependent claims, these rejections are now moot in view of the remarks and amendment made in connection with independent Claim 24. These dependent claims include all of the limitations of the base claim and any intervening claims, and recite additional features which further distinguish these claims from the cited references. Therefore, dependent Claims 27-29 and 33-35 are also in condition for allowance.

The remarks presented above in connection with Claim 1 also apply to independent Claims 38 and 39. As previously mentioned, *Moles* at least fails to describe a provisioning Web service that provides a single point of interface for the network service that is to provision the mobile terminal. Claims 38 and 39 have been amended to restate that the provisioning Web service provides a single point of interface as seen from a network service(s) that is to provision the mobile terminal. For at least this reason and those set forth in connection with the remarks to Claim 1, Claims 38 and 39 are not anticipated by *Moles*, and the rejections thereto should be withdrawn.

Claims 2-7, 25-26, 30-32, 36 and 37 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Moles* as applied to Claims 1, 8-24, 27-29, 33-35, and 38-39, in further view of Scott Seely "Web Service description and Discovery Using UDDI, Part II", Microsoft Corporation (hereinafter *Seely*). The Applicant respectfully traverses the Examiner's rejection.

The Applicant respectfully contends that the Examiner has failed to establish a *prima facie* case of obviousness based on the combination of references of *Moles* and *Seely* under 35 U.S.C. §103(a). To establish a *prima facie* case of obviousness based on a combination of references, three basic criteria must be met, as is set forth in M.P.E.P., §2143:

- 1) There must be some suggestion or motivation, either in the reference itself or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings;
- 2) There must be a reasonable expectation of success; and
- 3) The prior art references must teach or suggest all of the claim limitations.

The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. See *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). Further, the prior art must suggest the desirability of the *combination* of the references. *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990). The Applicant does not necessarily acquiesce that there would be a reasonable expectation of success, and the Applicant reserves the right to address any such issues where they may exist. However, the *prima facie* case of obviousness necessarily fails as the prior art references fail to teach or suggest all claim limitations, and there is no suggestion or motivation to combine the reference teachings.

As previously stated, the Applicant respectfully contends that *Moles* fails to teach the claimed subject matter that the Examiner alleges is taught by *Moles*. Dependent Claims 2-7 are directly or indirectly dependent from independent Claim 1, and dependent Claims 25, 26, 30-32 and 36 are directly or indirectly dependent from independent Claim 24. In rejecting these dependent claims, the Examiner admits that *Moles* is relied upon as teaching the claimed elements from their respective independent claims. As stated above, the Applicant respectfully submits that *Moles* fails to teach various features of these respective independent claims. *Seely* fails to remedy this deficiency, and therefore neither *Moles* nor *Seely*, either alone or in combination, teach all of the elements of the dependent claims which necessarily include the features claimed in their respective independent claims.

With respect to dependent Claims 2 and 3, the Examiner acknowledges that *Moles* fails to disclose all of the text of dependent Claim 2. As previously indicated, *Moles* also fails to teach or suggest at least a provisioning Web service that provides a single point of interface for the network service for provisioning the mobile terminal. *Seely* also fails to teach at least this claimed feature of Claim 2. Therefore, neither *Moles* nor *Seely*, either alone or in combination, teach or suggest all the limitations of Claim 2 as required to establish *prima facie* obviousness. For at least this reason, Claim 2 is in condition for allowance.

Claim 3 is indirectly dependent from Claim 1, and therefore also includes claimed features not taught or suggested by *Moles*, *Seely*, or a combination thereof. Further, while the Examiner rejected Claim 3, the Examiner has not identified any portion of *Moles* or

Seely that teaches or suggests parsing requests or generating responses thereto. For at least this additional reason, the Examiner has failed to establish *prima facie* obviousness with respect to Claim 3.

It is also noted that there must be some actual *motivation* to combine *Moles* and *Seely* found in the references themselves or the knowledge of one of ordinary skill in the art that would suggest the combination. Without a suggestion of the desirability of “the combination,” a combination of such references is made in hindsight, and the “range of sources available, however, does not diminish the requirement for actual evidence.” *In re Dembiczak*, 50 USPQ2d 1614 (Fed. Cir. 1999). *Moles* fails to address Web services in any form, and *Seely* fails to discuss provisioning of mobile devices. Therefore, there is no motivation to combine such references found in the references themselves.

The Examiner is thus ostensibly taking the position that any motivation to combine *Moles* and *Seely* is based on motivation by one of ordinary skill in the art to “allow users to receive the desired network resources” (see Detailed Action, paragraph 18). However, it is a requirement that actual evidence of a suggestion, teaching or motivation to combine prior art references be shown, and that this evidence be “clear and particular.” *In re Dembiczak*, 50 USPQ2d 1614 (Fed. Cir. 1999). Broad conclusory statements regarding the teaching of multiple references, standing alone, are not evidence. *Id.* The examiner must show some objective teaching leading to the combination. *In re Fine*, 837 F.2d 1071, 1075, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988). It is respectfully submitted that there is no such objective teaching in *Moles* that leads “to the combination” of *Moles* with *Seely* or vice-versa. It is respectfully submitted that the Examiner has pieced together aspects purportedly found in the prior art to arrive at the invention through impermissible hindsight. As stated by the Federal Circuit:

“Combining prior art references without evidence of such a suggestion, teaching, or motivation **simply takes the inventor’s disclosure as a blueprint for piecing together the prior art to defeat patentability--the essence of hindsight.**”

In re Dembiczak, 50 USPQ2d 1614, (Fed. Cir. 1999) (citing *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1138, 227 USPQ 543, 547 (Fed. Cir. 1985); emphasis added).

It is respectfully contended that the Examiner's rationale for motivating one to combine *Moles* and *Seely* of allowing users to receive the desired network resources falls well short of the mandate for establishing *prima facie* obviousness. For at least this additional reason, the Applicant respectfully submits that the Examiner has failed to establish a *prima facie* case of obviousness, and dependent Claims 2-3 are allowable over the cited prior art. The Examiner rejected dependent Claims 5, 25 and 26 for the same reasons, and the Applicant contends that the aforementioned arguments equally apply to Claims 5, 25 and 26.

With respect to dependent Claims 4, 6 and 7, the Examiner acknowledges that *Moles* fails to disclose SOAP, UDDI, and WSDL. Claim 4 indicates that parsing requests and generating responses thereto includes implementing SOAP for parsing the requests and generating the responses. The cited portion of *Seely* relied upon by the Examiner as implementing SOAP for parsing requests and generating responses is on page 8 of *Seely*, which merely states "[n]ext time, we will have a guest column from Allen Wagner. Allen will be discussing techniques for handling large SOAP messages." Page 8 also identifies a book having a title including the word "SOAP" and that the author wrote and maintains a small SOAP library. The Applicant respectfully submits that this clearly fails to teach using SOAP to parse requests from Web service modules within a provisioning Web service and network service and to generate responses thereto. The Applicant respectfully submits that the Examiner has clearly failed to establish *prima facie* obviousness for Claim 4.

It is further noted that the Examiner failed to address the language of Claim 7, although Claim 7 was also rejected by the Examiner. The Examiner failed to identify any teaching or suggestion in *Moles*, *Seely*, or a combination thereof, that teaches enabling the application to initiate requests to provision the mobile terminals via the Web service endpoint. For at least this reason, *prima facie* obviousness has not been established with respect to Claim 7.

The Examiner also fails to set forth the requisite motivation to combine *Moles* with *Seely* for Claims 4, 6 and 7. The Examiner's rationale for combining these references as they apply to these claims is that "SOAP is known as a XML based protocol (i.e., communication protocol) that provides the Internet Web service." First, the Applicant

respectfully contends that this alleged motivation is merely a statement of what SOAP is, and not why *Moles* and *Seely* could or should be *combined*. Further, this stated motivation does not address Claims 6 or 7, and therefore the Examiner has failed to establish the requisite motivation to combine *Moles* and *Seely* as it applies to Claims 6 and 7. For at least these additional reasons, Claims 4, 6 and 7 are not rendered obvious in view of the combination of cited references.

Dependent Claim 31 is ultimately dependent from independent 24, and as previously indicated *Moles* fails to teach or suggest at least a provisioning Web service that provides a single point of interface for the network service. *Seely* also fails to teach at least this claimed feature, and therefore neither *Moles* nor *Seely*, either alone or in combination, teach or suggest all the limitations of Claim 31 as required to establish *prima facie* obviousness. For at least this reason, Claim 31 is in condition for allowance. The Examiner has rejected Claim 36 for the same reasons set forth in Claims 25-35. Claim 36 is dependent from independent Claim 24, and for reasons stated above, Claim 36 is therefore not rendered obvious by the combination of *Moles* and *Seely*.

Claim 37 is an independent claim directed to a suite of Web services to provision a terminal for use of an application on a network. Again, it is noted that neither *Moles* nor *Seely*, alone or in combination, teach or suggest a provisioning Web service that provides a single point of interface to the network service for provisioning the mobile terminal for use of the application provided by the network service. For at least this reason, *prima facie* obviousness has not been established for Claim 37, and Claim 37 is allowable over the cited combination of references. Further, the Examiner appears to take Official Notice of the fact that it would be obvious to one of ordinary skill in the art to “deliver to the mobile terminal an address of the data object stored at the delivery Web service if the terminal type indicates that the mobile terminal is not capable of receiving the data object via a push operation.” The Applicant respectfully disagrees, and respectfully submits that this claimed feature does not constitute facts outside of the record which are capable of instant and unquestionable demonstration as being well-known in the art. The references relied on by the Examiner, for example, fail to disclose this information, and Applicant contends that reasonable doubt exists regarding the circumstances justifying the Examiner’s statement that such claimed

feature that is outside the record would be obvious to one of ordinary skill in the art, taking the claim as a whole. If the Examiner maintains this rejection, the Applicant respectfully requests that the Examiner provide evidence that demonstrates the appropriateness of the officially noticed facts pursuant to MPEP § 2144.03. Applicant reserves the opportunity to respond to the Examiner's comments concerning any such judicially noticed facts.

Claims 30 and 32 were rejected for the same reasons as set forth in Claim 37. The Applicant notes that claims 30 and 32 are ultimately dependent from independent Claim 24, and as previously indicated *Moles* fails to teach or suggest at least a provisioning Web service that provides a single point of interface for the network service. *Seely* also fails to teach at least this claimed feature, and therefore neither *Moles* nor *Seely*, either alone or in combination, teach or suggest all the limitations of Claims 30 and 32 as required to establish *prima facie* obviousness.

If the Examiner believes it necessary or helpful, the undersigned attorney of record invites the Examiner to contact him at 651-686-6633 (x110) to discuss any issues related to this case.

Respectfully submitted,

Date: January 21, 2004

By: 

Steven R. Funk
Reg. No. 37,830
Crawford Maunu PLLC
1270 Northland Drive, Suite 390
St. Paul, Minnesota 55120
(651) 686-6633